

Polypropylene Bormed™ HD810MO

Description

Bormed HD810MO is a resin intended for evaluation for use in Healthcare applications. Bormed HD810MO is a nucleated polypropylene homopolymer with a medium melt flow rate. Bormed HD810MO is specially formulated for production of articles which need to be sterilized with radiation (gamma and beta radiation). Tests on specimen radiated at 25 kGy have shown stability for 5 years when stored at room temperature. Material can also well be sterilised with ethylene oxide or steam.

CAS-No. 9003-07-0

Applications

Bormed HD810MO has been evaluated according to different regulations and norms. Typical applications are mentioned below for Medical and Diagnostic devices or Pharmaceutical packaging. However, Borealis should be consulted for final approval to evaluate the use of Bormed HD810MO.

Disposable non pre-filled syringes Catheter Blood collection systems Laboratory disposable

The customer should be aware that Bormed products may only be used in applications which are pre-approved for evaluation by Borealis received in the form of a risk assessment form (RAF) review response. Without such pre-approval, no use of the grade shall be made. In case of doubt, the customer should seek pre-approval for evaluation from Borealis to proceed through their Sales or technical contact. Borealis makes no warranties beyond what is contained in this product datasheet and the customer is responsible for reading and accepting the disclaimer as contained in this product datasheet.

Special Features

Radiation resistance

High transparency

Physical Properties

Property	Typical Value Data should not be used for	Test Method specification work	
Density	907 kg/m³	ISO 1183	
Melt Flow Rate (230 °C/2,16 kg)	10 g/10min	ISO 1133	
Flexural Modulus	1.250 MPa	ISO 178	
Tensile Modulus (1 mm/min)	1.100 MPa	ISO 527-2	
Tensile Strain at Yield (50 mm/min)	13 %	ISO 527-2	
Tensile Stress at Yield (50 mm/min)	29,5 MPa	ISO 527-2	
Melting temperature (DSC)	164 °C	ISO 11357-3	
Heat Deflection Temperature (0,45 MPa)	90 °C	ISO 75-2	
Charpy Impact Strength, notched (23 °C)	4,5 kJ/m²	ISO 179/1eA	





Bormed HD810MO

Processing Techniques

This product is easy to process with standard injection moulding machines.

Following parameters should be used as guidelines:

Melt temperature Holding pressure Mould temperature Injection speed 220 - 260 °C 200 - 500 bar 30 - 40 °C Medium to high

Minimum to avoid sink marks.

Shrinkage 1 - 2 %, depending on wall thickness and moulding parameters

Storage

Bormed HD810MO should be stored in dry conditions at temperatures below 50°C and protected from UV-light. Following afore-mentioned conditions the material can be stored for a period of up to 3 years after production. Improper storage can initiate degradation, which results in odour generation and colour changes and can have negative effects on the physical properties of this product.

Safety

The product is not classified as dangerous.Please see our "Safety data sheet" / "Product safety information sheet" for details on various aspects of safety, recovery and disposal of the product. For more information, contact your Borealis representative.

Recycling

The product is suitable for recycling using modern methods of shredding and cleaning. In-house production waste should be kept clean to facilitate direct recycling.

